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ABSTRACT

A description and evaluation of 1973-74 programs funded by the Elementary and Secondary Education Act, Title I, for the Chattanooga Public School System in Tennessee, are contained in this document. The main project components are reading and mathematics. The major problem associated with the 1973-74 Title I programs was a result of the implementation of the Federal Court mandate on school desegregation. It caused administrative and logistic problems in the schools. The performance objectives established by the Chattanooga Public School System for the Title I elementary schools in reading, mathematics, self-image, and responsibility provided a basis for evaluation of the Title I programs. The results of the analysis of each performance objective indicated that certain objectives were fully met, certain objectives were partially met, and selected objectives were not met. (Author/AM)

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TITLE I EVALUATION REPORT

1973-74

CHATTANOOGA PUBLIC SCHOOLS

UD016708

U.S. DEPARTMENT OF HEALTH,
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ESEA TITLE I EVALUATION REPORT FOR FY 74

Name of the system Chattanooga Public Schools

Number (Unduplicated) of children in Title I activities:

Preschool	966	966*
Early Elementary	2,808	1,474*
Later Elementary	2,018	1,897*
Special Education	289	289*
Dropouts		
Children in private schools	61	61*

Number (Unduplicated) of Teachers in Title I activities: 166 201

Number (Unduplicated) of Aides in Title I activities : 89

*In January, 1974, Chattanooga Public Schools Court Order was implemented, and schools were paired and clustered. The two figures given represent Title I schools before the court plan was implemented and the schools after the changes were made.

IN SERVICE

Number of Days	Number of Consultants	Number of Teachers	Average Number of Days Per Teacher	Number of Aides	Average Number of Days Per Aide	Performance Objectives
1	1		1.0	47	1.0	April 5, 1974 - Aide Inservice
8	2	27	6.81	1	8	June 12-21 - Reading Workshop
10		23	9.52	0	0	Aug. 1-14 - Resource Teachers Inserv.
7		328	5.47	0	0	Aug. 15-23 - Teachers Inservice
3		0	0	155	2.80	Aug. 28-30 - Aide Inservice
						Aug. 15-16 - Kindergarten Inservice See Kindergarten

Name of System Chattanooga Public Schools

INSTRUCTIONAL ACTIVITIES

Name of ctivity	Grade Range of Participants	Number of Participants	Number of Teachers	Number of Aides	Performance Objectives for Activities
eading	K-6			85	See individual objectives for each
th	K-6			85	as described in evaluation.

Name of the System Chattanooga Public Schools

SUPPORTIVE SERVICES

Name of Service	Number of Students	Number of Staff	Staff Titles	Activity Supported
arent Involvement		3	1 P.I. Spec. 2 Aides	See answer to Question 10.
ealth Services		4	2 Nurses 2 Aides	Assisted parents in securing medical care for students with health problems. Assisted in implementing: 1. Vision screening 2. Tuberculin testing 3. Dental care for students eligible for dental clinics.

PLEASE LIST EACH QUESTION ON A SEPARATE PAGE

1. Did you reach the Performance Objectives (listed on pages 1 & 2) for FY 74 Title I activities. If not, state the probable reasons.

2. What other sources of information aided you in the evaluation of your project? Describe the sources and the results.

3. How were children selected to participate in Title I activities?

4. Describe the instructional activities funded under Title I for FY 74 This description should include specific activities, materials, equipment, personnel, consultants, and coordination with the regular school program.

5. What was the reason for using the particular supportive services specified on page 3, and in what ways did the services contribute to the outcome of the program?

6. Describe In-Service activities, and state the results of the measurement included in the objectives for In-Service. If additional evaluation procedures were used for In-Service, describe the results of these procedures.

7. What were the characteristics of your most successful activities?

8. Were other Federal Agencies involved in the Title I Project? If so, name them and describe the types of assistance provided by these agencies.

9. If private schools were involved in this project (see page 1), describe the services that were provided and the number of private school children involved in each activity.

10. How were parents and community involved in the Title I project? Describe the various activities in which parents and community members contributed. Were mothers of Title I children employed?

11. How did the monitoring system provide feedback to persons involved in the project? Describe the effect of the monitoring system on the Title I project.

12. How was information regarding the project disseminated?

13. What were some of the problems involved in the operation of your Title I project? How were these problems resolved, and how will this information be used in planning future projects?

14. What effect, if any, has Title I had on your regular school program? Have there been curriculum changes because of Title I? Changes in administration of the regular school program?

15. List recommendations that would improve the operation of Title I programs in your system.

INSTURCTIONS FOR PAGE 6

1. Please list all scores by grade levels.

2. All standardized tests used in measuring performance objectives should be listed on this page.

3. If tests were used that are not named in performance objectives, scores from these tests should also be listed.

4. Tests for K-12 should be listed.

5. If tests were administered in which scores are shown in letters (A, B, C, etc.), entries should be made on a separate sheet and these Scores should be listed separately for Title I children and non Title I children. The percent of children at each level (A, B, C, etc.) should be listed for both groups.

6. Instructions, definitions and explanations:

   Name of test - List the name of each test used in Title I activities. All other information should be listed across the form in line with the name.

   Each grade tested - List each grade separately that was tested.

   Area tested - State the curriculum area (i.e. general achievement, reading, math, etc.) that the test measures.

   Date - Enter the date on which the pretest was administered.

   Expected grade level - Enter the grade level at which the students should be performing on the date the test was administered (i.e. 2.3, 3.3, etc.).

System Average - The average for the entire school system on this date.

TI Ss - Title I students

N - List the number of children tested. It is extremely important that this number be given.

Scores - List the average score (in grade levels) for each grade tested in each curriculum area.

Non TI Ss in TI schools - List the number and average scores for all non-Title I students in Title I schools by grade and curriculum area.

Name of System Chattanooga Public School System

Name of Test	Each Grade Tested	Area Tested	Pretest							Posttest						
			Date	Expected Grade Level	System Average	TI Ss		Non TI Ss in TI Schools		Date	Expected Grade Level	System Average	TI Ss		Non TI Ss in TI Schools	
						N	Scores	N	Scores				N	Scores	N	Scores
CAT	2	Read Voc	10/73	2.00		377	1.19			4/74	3.0		377	2.49		
CAT	2	Read Com	10/73	2.00		350	1.30			4/74	3.0		350	2.04		
CAT	2	Math Com	10/73	2.00		352	1.23			4/74	3.0		352	2.16		
CAT	2	Math Com	10/73	2.00		307	1.34			4/74	3.0		307	2.18		
CAT	3	Read Voc	10/73	3.00		315	1.71			4/74	4.0		315	2.55		
CAT	3	Read Com	10/73	3.00		313	1.92			4/74	4.0		313	2.78		
CAT	3	Math Com	10/73	3.00		320	1.93			4/74	4.0		320	2.89		
CAT	3	Math Com	10/73	3.00		319	1.91			4/74	4.0		319	2.87		
CAT	4	Read Voc	10/73	4.00		597	2.59			4/74	5.0		597	3.06		
CAT	4	Read Com	10/73	4.00		594	2.69			4/74	5.0		594	3.55		
CAT	4	Math Com	10/73	4.00		594	2.87			4/74	5.0		594	3.06		
CAT	4	Math Com	10/73	4.00		598	2.87			4/74	5.0		594	3.55		
MAT	5	Wd Knowl	10/73	5.00		498	3.20			4/74	6.0		498	4.03		
MAT	5	Reading	10/73	5.00		493	3.43			4/74	6.0		498	4.01		
MAT	5	Math Com	10/73	5.00		488	3.96			4/74	6.0		488	4.85		
MAT	5	Math Com	10/73	5.00		484	3.56			4/74	6.0		484	4.41		
MAT	5	MPS	10/73	5.00		478	3.54			4/74	6.0		478	4.34		
CAT	6	Read Voc	10/73	6.00		672	3.54			4/74	7.0		672	4.59		
CAT	6	Read Com	10/73	6.00		672	3.92			4/74	7.0		672	4.86		
CAT	6	Math Com	10/73	6.00		680	4.18			4/74	7.0		680	5.27		
CAT	6	Math Com	10/73	6.00		656	4.06			4/74	7.0		656	5.01		

NAME OF SYSTEM Chattanooga Public Schools

FISCAL YEAR ENDING JUNE 30, 19 74 .

Indicate the amount of Title I funds expended for instructional activities and supportive services.

	INSTRUCTIONAL ACTIVITIES	ESTIMATED COST OF EACH INSTRUCTIONAL ACTIVITY (ROUNDED TO NEAREST DOLLAR)				
		Public Schools		Private Schools		
		1-6	7-12	1-6	7-12	Total
1	Art					
2	Business Education					
3	Cultural Enrichment					
4	English-Reading					
5	English-Other Language Arts	536,829.00		7,615.00		544,444.0
6	Foreign Language					
7	Home Economics					
8	Industrial Arts					
9	Mathematics	264,408.00		3,751.00		268,159.0
10	Music					
11	Phys. Ed./Recreation					
12	Natural Science					
13	Social Science					
14	Other Vocational Education					
15	Special Activities for Handicapped					
16	Other Instructional Activities (Specify):					
17	Total Estimated Cost	801,237.00		11,366.00		812,603.0
18	Pre-K. & K.	103,844.00				103,844.0

	SUPPORTIVE SERVICES	ESTIMATED COST OF EACH SERVICE ACTIVITY (ROUNDED TO NEAREST DOLLAR)						
		Public Schools			Private Schools			
		K	1-6	7-12	K	1-6	7-12	Total
1	Attendance							
2	Clothing							
3	Food							
4	Guidance Counseling							
5	Health-Dental	14,873.	21,098.					
6	Health-Medical							35,971.0
7	Library							
8	Psychological							
9	Social Work							
10	Speech Therapy							
11	Transportation		1,150					1,150.0
12	Special Services for Handicap							
13	Other Services (Specify) Comm.Servs.		25,444					25,444.0
14	Total Estimated Cost for Service Activities	14,873	47,692					62,565.0
	GRAND TOTAL (Add lines 17, 18 & 14)	118,717	848,929.			11,366		979,012.0

Name of System Chattanooga Public School System

Question 1. *Did you reach the performance objectives for the fiscal year 1974 activities? If not, state the probable reasons.*

The results of the analysis of each performance objective are presented in the narrative section of this report and indicate that certain objectives were fully met, certain objectives were partially met, and selected objectives were not met. This is to be expected since many of the objectives dealt with learning modifications measured by individual performances on standardized tests and locally developed check lists. Current research would indicate that many gains cannot be measured in the short duration of one year, but are the products of an ongoing learning process.

Additionally, the problems associated with the implementation of the Federal Court desegretation order impacted the results of the objectives. Finally, the continuous examination of readings and mathematics programs in an attempt to find better ways of teaching may affect results.

Name of System Chattanooga Public School System

Question 2. *What other sources of information aided you in the evaluation of your project? Describe the sources and results.*

In addition to the standardized measure of the California Achievement Test and the Metropolitan Achievement Test, locally developed Self-Image Performance Scale instruments were administered to public school pupils throughout the Title I target schools. The Continuous Progress Reading Evaluation Program was the major evaluative device for grades 1-3 in the public school system and this measure was also used in grades 4-6. The McKeldin Math Evaluation Checklist was used in grades 1-3. Standardized achievement measures were given to all participants in grades 1-6.

Data were gathered from parents who participated in the Policy Advisory Committee (PAC) activities, from program participants including teachers, aides, curriculum specialists, and central staff members, and from detailed narrative reports by the parent involvement specialist and the Title I nurses. Additional data were contributed by the Logistics and Fiscal Affairs Office of the system, as well as by personal interviews with administrators, teachers, and aides in the total program.

These data contributed to the overall Title I program and allowed for a breadth of analysis not achieved by using only standardized tests.

Name of System Chattanooga Public School System

Question 3. *How were children selected to participate in Title I activities?*

A detailed explanation of the selection process for Title I participants is presented in the overall evaluation design section of the narrative report.

Name of System Chattanooga Public School System

Question 4. *Describe the instructional activities funded under Title I for FY 73. This description should include specific activities, materials, equipment, personnel, consultants, and coordination with the regular school program.*

Elementary Reading

Target population. The Title I reading skills improvement program was focused on specifically identified participants in grades one through six in 11 target schools, whose reading achievement was inadequate (as determined by the criteria described in another section).

Purpose. The basic purpose of the elementary reading component of the project was to provide an intensified program of individualized instruction in reading skills, based on a continuous progress reading curriculum and implemented daily by all classroom teachers in the target schools.

Rationale. The Title I reading component was based on the following assumptions:

1. Children in the poverty condition who were educationally deprived needed the experience of successful learning in the regular classroom setting, free from the sense of being stigmatized as failures who must be removed from the social mainstream of class activities with their peers.

2. Their learning problems and needs were distinctive in each individual; therefore, the instructions needed to be individualized.

3. Many students who had lived in the poverty condition lacked the order and structure required to help them grasp the relationships among isolated experiences and to build in sequence a mastery of the complex skills of reading; they, therefore, needed structure and sequence in their reading curriculum.

4. Learning styles of individuals varied greatly, particularly among the target group in which the incidence of physiological problems of vision, hearing, and perception was high; they, therefore, needed access to many types of programs, materials, and media.

Activity goals. Activity goals of the elementary reading component of the Title I project were:

1. To provide pretraining and on-site assistance to teachers by professional staff personnel in diagnosing reading skills needs of individual students and prescribing activities appropriate to their needs.

2. To provide paraprofessional assistance to teachers which would extend their capacities to plan and implement individualized compensatory reading instruction for Title I students.

3. To provide a wide variety of reading materials and learning aids carefully selected and/or prepared for the target group of students.

4. To provide for the coordinated focus of both local and project resources on the improvement of reading skills of educationally deprived students in the target schools.

5. To provide continuing assessment of the progress of individual students in relation to the processes applied in program implementation and continuing refinements of those processes.

6. To expand the knowledge and expertise of professional personnel at all levels in the systematic provision of successful reading improvement experiences for students in the poverty condition who were educationally deprived.

Reading program variables. The Title I reading program was conducted daily by the regular classroom teacher in each class in each Title I school with assistance from paraprofessional reading aides. On-site leadership for the planning and coordination of teacher/aide activities in the reading program was provided by the reading resource teacher assigned to each school.

Content. The reading objectives on which daily lesson plans for individualized instruction were based were derived from the *Continuous Progress Reading Curriculum for Chattanooga Public Schools.* The curriculum was organized in 11 levels representing the skills which were generally described for inclusion in the first six grades of school. Each level included the following categories: language skills; vocabulary; word attack skills; comprehension skills; study skills; locational skills; and appreciation, attitude, and interest. In addition to these, the lower levels contained two additional categories: basic behavioral and general readiness skills, and perceptual skills.

Activities for the accomplishment of each reading objective were developed to include the use of a variety of print and audiovisual materials and teacher-prepared materials. Numerous activities were preplanned for each skill at each curriculum level and teachers were regularly engaged in developing new activities to meet the diagnosed needs and interests of Title I students. Activities were described in a printed Reading Activities Guide for Teachers and those selected for each student were recorded on teachers' daily lesson plans.

Organization. The Title I reading program was incorporated into the established organization of the target school, with such adaptations as were mutually determined by the principal, resource teacher, and teachers. Reading instruction was provided daily for all Title I students. The instruction of each participant was individualized according to his diagnosed needs, but instruction included provisions for both shared learning activities and those which were singularly experienced. Part of the instruction of participants was in the classroom in group activities with the teacher and aide; part of their instruction was through individual student-teacher and individual student-aide activities; part of their instruction was through individually prescribed independent activities; part of their instruction required short periods of removal from the classroom for one-to-one assistance by teacher or aide or for specially prescribed work on machine-based programs (e.g., Hoffman Reading System and System 80), depending upon their individually diagnosed needs.

A major project requirement was the provision of regularly scheduled planning periods for teachers to work with the resource teacher in the development of daily reading lesson plans for their Title I students. This facet of the program was slightly revised (on the basis of teacher input) to allow for one half-day planning period to be scheduled during the week prior to the beginning of each program cycle and a one-hour planning session to be scheduled each week. This revision in the project from the former requirement of biweekly planning in half-day sessions was made because many teachers feel that the purpose of individualization is better served by more frequent diagnosis and prescription. Planning periods were provided by the use of aides for the relief of teachers by grade groups on a staggered schedule so that the resource teacher could provide leadership in each planning session, working with a small number of teachers at a time.

Four major program cycles were conducted during the school year. Each cycle of approximately eight weeks was conducted in two weeks' units of work. In scheduled planning sessions, teachers by grade groups worked with the reading resource teacher and those aides not engaged in classroom relief duties to develop reading lesson plans for Title I students for a week's period. Lesson plans included a designation of the specific skills and concepts to be learned, student activities with teachers, student activities with aides, independent student activities, materials needed, and the instruments and methods to be used for the progress check at the end of the work unit. Based on the lesson plans developed, aides were scheduled by the reading resource teacher for the planned interim. Teachers and aides implemented the plans; reading resource teachers were responsible for the coordination of their efforts, support in the development of improved techniques, assistance in the selection or design of needed materials, and problem diagnosis for students who did not respond successfully; principals had overall responsibility for the implementation of the program in accordance with the project requirements. At the end of each work unit, progress was checked and a new set of lesson plans developed for the next interim, based on the results of progress checks. At the end of eight weeks, a review and evaluation of progress was scheduled. The calendar for program cycles was:

Cycle I (nine weeks): September 17 - November 16

Because of court ordered desegregation plan, which was implemented in January, Cycles II and III were combined, beginning: November 2 and ending: March 29.

Cycle IV (six weeks): April 15 - May 24

The variation in time periods was a factor of the early planning need, the schedule of spring holidays, and the evaluation purposes of Cycle IV.

Method and procedures. The method which characterized the Title I reading component was diagnostic and prescriptive, within the structure of the *Continuous Progress Reading Curriculum*, and applying multimedia programs and materials in the prescriptions of individual student activities. The basic steps in the program were:

1. Initial diagnosis of each student in early September to determine his instructional level on the *Continuous Progress Reading Curriculum*. This was accomplished by the use of the CPS Graded Word List (or equivalent instrument). Graded paragraph reading texts of successive levels of difficulty was used as needed to determine comprehension and fluency levels.

2. For each student participant, the teacher determined by diagnostic procedures applied intermittently in each grade the precise skills which the student lacked within his curriculum level. For the diagnostic purpose, easily administered diagnostic instruments were prepared for each reading skill in the sequential curriculum; others

developed in the ongoing conduct of the program.

3. For each skills need identified in the diagnostic process, teachers prescribed specific learning activities. For prescriptive purposes, a book of activities appropriate for each skill at each curriculum level was developed and will be expanded by the addition of teacher-developed activities which prove successful in the ongoing project.

4. Following each individual diagnosis of specific skills needs, the teacher developed a prescribed lesson plan which included: (1) the designation of the child's reading objectives for the planned period (these were derived from the related objectives in the reading curriculum); (2) the prescribed activities to meet identified objectives for each student; (3) the materials selected and/or prepared for each activity; and (4) the instrument or procedure used to check the student's progress toward the accomplishment of each objective.

5. Based on the planned activities for individual students, teachers determined those which could be conducted as group activities, those which had to be individually taught, those which could be supervised by aides, and those which were appropriate for independent student study. Grouping and class scheduling was the responsibility of the classroom teachers; the scheduling of aides to fulfill their responsibilities in the planned activities was a function of the resource teacher, subject to the approval of the principal.

6. Lesson plans were implemented for the planned period and a progress check was made. It should be noted that daily activities sometimes varied slightly from original plans, but teachers were asked

to log major variations in order to maintain accurate records on which continuing plans could be based and evaluations made.

7. Skills objectives which had not been mastered in a planned interim were carried over into the next planned unit and new activities were planned to assure the successful mastery of basic skills.

8. At the conclusion of each cycle, each participant's progress was evaluated to identify any skills taught during the cycle which might have been inadequately retained. If a skill had not been adequately mastered, it was carried over for reteaching in new context.

An individual reading profile was maintained for each student, showing the precise reading skills which were taught and mastered. The profile will be a part of the student's cumulative record.

Facilities, Equipment, and Materials. Multimedia programs and materials were used in the prescribed student activities. These included basal reading programs, Hoffman Reading Systems, System 80 programs, learning kits, library materials, a variety of other print and audiovisual materials, and teacher-prepared materials. (It should be noted that the budget items for equipment and materials were reduced below a realistic level in order to keep the initial budget for this proposal in line with the reduced figure required. These items received first consideration where actual allocations permitted an increase of Title I funds.)

Personnel. Direct project staff support to the reading program included two program specialists, each of whom served an assigned set of target schools, and one resource teacher assigned to each target school.

A total of 60 paraprofessional instructional aides was assigned to the schools to assist teachers in implementation of the reading program. The number of aides per school was based on the number of Title I participants in the school.

Program specialists were responsible for forwarding the purposes of the Title I program with regard to all elements which directly or supportively contributed to the in-school program operations. Working in line responsibility to the project director, each specialist worked with target school principals, teachers, and resource teachers for the continuous refinement and improvement of the reading program. (They also had supportive responsibilities in the elementary mathematics and kindergarten prereading components.) The program specialists had responsibilities for coordinating related supportive activities of local curriculum specialists in the Title I program. In cooperation with the project director they planned and conducted staff development activities for teachers, resource teachers, and aides. Specialists had regularly scheduled conferences with the project director. They attended and shared in the planning of staff activities for regular Title I principals' meetings and Policy Advisory Committee meetings. The program specialists had continuing responsibility for assessing the program in each school; recommending program improvements; and assisting the principals, teachers, and resource teachers in refining the program and advancing their respective lines of expertise.

Reading resource teachers had responsibility for in-school development and conduct of the reading program for Title I students within the parameters set by the principal for the overall operation of the school. Each resource teacher had scheduled conferences with the principal every two weeks for the coordination of their efforts. The resource teacher met with the Title I staff every two weeks for project planning and coordination of efforts. Resource teachers shared with program specialists and the project director in planning and conducting staff development activities for teachers and aides. They had major in-school responsibilities for scheduling and leading teacher planning sessions; scheduling the activities of instructional aides; leadership in materials selection, preparation, and distribution; and for ongoing assistance to teachers in the application of diagnostic procedures and the prescription of appropriate learning activities.

Instructional aides were assigned to the reading program to be regularly scheduled (by the reading resource teacher working with principal and teachers) for reading assistance. Aides gave auxiliary service to teachers between 8:00 and 9:00 a.m., during the noon hour, and after 2:30 p.m. They were scheduled to relieve teachers of grade groups for scheduled planning sessions. They assisted students in individual use of reading equipment and materials, and in group follow-up activities prescribed by the teacher. Aides assisted teachers and resource teachers in materials preparation and distribution.

Elementary Mathematics

Target Population. The Title I mathematics skills improvement program was focused on specifically identified participants in grades one through six in the 11 target schools whose mathematics achievement was inadequate (as determined by the criteria described in another section).

Purpose. The basic purpose of the elementary mathematics component of the project was to provide a program of individualized instruction in mathematics skills based on a continuous progress mathematics program and implemented daily by all classroom teachers in the target schools.

Rationale. The Title I mathematics component was based on the following set of assumptions:

1. Children in the poverty condition who were educationally deprived needed the experience of successful learning in the regular classroom settings, free from the sense of being stigmatized as failures who must be removed from the social mainstream of class activities with their peers.

2. Their learning problems and needs were distinctive in each individual; therefore, their instruction needed to be individualized.

3. Remediation of mathematics learning problems required a heavy emphasis on concrete experiences in order that abstractions could be made meaningful.

4. Both the lack of structure in the out-of-school lives of many students in the poverty condition and the structural nature of mathematics indicated the need for a structured and orderly sequence of learning activities in the mathematics curriculum.

5. Learning styles of individuals varied greatly, particularly among the target group, as wherein the incidence of physiological problems of vision, hearing, and perception was high; they, therefore, needed access to many types of programs, materials, and media.

Activity Goals. Activity goals of the elementary mathematics component of the Title I project were:

1. To provide pretraining and on-site assistance to teachers by professional staff personnel in diagnosing mathematics skills needs of individual students and prescribing activities appropriate to their needs.

2. To provide for the coordinated focus of both local and project resources on the improvement of mathematics skills of educationally deprived students in the target schools.

3. To provide a wide variety of mathematics materials and learning aides, carefully selected and/or prepared for the target group of students.

4. To provide continuing assessment of the progress of individual students in relation to the processes applied in program implementation and continuing refinement of those processes.

5. To expand the knowledge and expertise of professional personnel at all levels in the systematic provision of successful mathematics improvement experiences for students in the poverty condition who were educationally deprived.

Mathematics Component Variables. The Title I mathematics program was conducted daily by the regular classroom teacher in each class in each Title I school. Project staff assistance to teachers was provided by the two program specialists (previously described) and one mathematics resource teacher who served all target schools. The locally supported mathematics specialist provided supportive service to the Title I mathematics program.

Content. The mathematics objectives on which daily lesson plans for individualized instruction were based were derived from the *Continuous Progress Mathematics Curriculum for Chattanooga Public Schools.* The curriculum was organized in 14 levels representing the skills which were generally described for inclusion in the first six grades of school. Each level included nine categories, each of which was developed sequentially in order of increasing difficulty and complexity in the successive levels. They included: numbers and numeration; sets and set notation; mathematical operations; mathematical sentences; problem solving and application; measurement; geometry; graphs; and number theory.

Activities related to each mathematics skill were developed to guide teachers in prescribing individualized programs for their students; as teachers developed new activities which proved successful, they were incorporated in the activity resource book.

Organization. The Title I mathematics program was incorporated in the established organization of each target school, with the provision of daily instruction in mathematics for all participants. Instruction was individualized according to the diagnosed needs of each participant, with provisions for both shared learning activities and those which were singularly experienced.

In order to provide a regular time for all teachers in the target schools to work in small groups with the mathematics specialist for Chattanooga Public Schools, one-hour sessions were scheduled each month. In each school, the project aides relieved small groups of teachers for one-hour sessions on a staggered schedule. The development of this schedule of mathematics planning sessions was a cooperative responsibility of the project director and program specialists, the principal, and the mathematics specialist. The project mathematics resource teacher provided follow-up assistance to teachers in each school.

Method and Procedures. The method which characterized the Title I mathematics component was diagnostic and prescriptive, with the structure of the *Continuous Progress Mathematics Curriculum*, and applying multimedia programs and materials in the prescriptions of individual student activities.

During September, students were placed at the appropriate curriculum level by the use of the McKeldin Mathematics Evaluation Checklist. Teachers then diagnosed each child's skills needs within his curriculum level and prescribed activities related to his diagnosed needs. Activities included group work, individual instruction with teacher or aide, and independent activities. Regular assessment of progress was made to provide the basis for the development of new individualized lesson plans.

Facilities, Equipment, and Materials. Multimedia programs and materials were used in the prescribed student activities with a heavy emphasis on the use of concrete materials. (It should be noted that the budget items for materials and equipment were reduced to minimum level. When additional funds were made available, these items received first consideration for increased amounts.)

Personnel. Direct project staff support to the mathematics program included the two program specialists (previously described in relation to reading) and one mathematics resource teacher. The mathematics specialist for Chattanooga Public Schools provided specialized assistance to teachers and project staff personnel in the ongoing program.

Kindergarten Pre-reading Component

Target Population. The kindergarten pre-reading component was focused on identified participants in each of the projected kindergarten classes (25) which were located in the Title I target schools. Since it was not possible to pretest prospective kindergarten enrollees at the beginning of the year, the number of participants for each school was based on the school's percentage of first grade students in 1972-73 who were identified as Title I participants. Specific students were identified by teachers on a Kindergarten Eligibility Checklist developed by staff and evaluation consultants prior to October 1, 1973.

Purpose. The basic purpose of the kindergarten pre-reading component was to provide a compensatory instructional thrust for the development of language and pre-reading skills among disadvantaged preschool children in the Title I target schools.

Rationale. Research had indicated that one of the major deterrents to successful achievement of students in the poverty condition was the limited development of language during preschool years. The works of Bloom and others on the development of intellect during the early years indicated a particular need to provide compensatory programs for the preschool child. The close relationship between language and intellect gives a sense of urgency to the movement toward early intervention for the improvement of language development among preschool children whose backgrounds have limited their opportunities in this area.

Experience in work with preschool children in the Head Start programs has led to the conclusion that the development of language and pre-reading skills among disadvantaged preschool children requires deliberate and systematic planning. Mere exposure to new language interactions will not suffice.

These considerations, coupled with the need for a continuity of experience from preschool into the primary programs, undergirded the compensatory kindergarten program designed for the Title I participants.

Activity Goals. Activity goals of the kindergarten pre-reading component of the Title I project were:

1. To provide pretraining and on-site assistance to kindergarten teachers in the target schools in applying appropriate techniques for the development of language and pre-reading skills.

2. To provide a wide variety of materials and learning aids for the improvement of language and pre-reading skills of Title I participants.

3. To provide for the coordinated focus of both local and project resources on the improvement of language and pre-reading skills among the Title I participants.

4. To provide continuing assessment of the progress of individual participants in relation to the processes applied in program implementation and continuing refinement of those processes.

5. To expand the knowledge and expertise of professional personnel at all levels in the systematic provision of successful language and pre-reading improvement experiences for preschool children in the poverty condition.

Kindergarten Pre-reading Component Variables. The Title I kindergarten pre-reading program was conducted daily by the regular teacher in each kindergarten class in the 16 target schools. On-site assistance and support was provided by the project reading resource teachers and program specialists and by the early childhood specialist for Chattanooga Public Schools.

Content. The kindergarten curriculum developed for Chattanooga Public Schools and the readiness level (Level I) of the *Continuous Progress Reading Curriculum for Chattanooga Public Schools* were applied in the target kindergarten classes. At the readiness level of the pre-reading curriculum, skills were categorized as: (1) basic behavioral and general readiness skills; (2) perceptual skills; (3) language skills; (4) vocabulary; (5) word attack readiness, such as visual clues, configuration, and language context clues; (6) comprehension; (7) readiness for study skills; (8) readiness for locational skills; and (9) appreciation, attitude, and interest.

In the compensatory pre-reading program, readiness activities for the skills categories defined above were developed and implemented, with adaptations to the language maturity of the Title I participants. It was the Title I purpose to identify game-like activities and rich, child-centered experiences within which pre-reading skills development could take place--*not to arrange a formal and rigid instructional setting for preschool children.* Local and project staff personnel assisted teachers in identifying the types of activities and teaching techniques which could preserve the desired open-learning atmosphere appropriate for a preschool class and still assure the inclusion of experiences which would contribute to language and pre-reading skills development.

Organization. The Title I pre-reading program was incorporated in the established organization of the target school and the kindergarten class therein. Compensatory activities for individual Title I participants were planned for implementation in the classroom setting.

Method and Procedures. In essence, the method applied to the improvement of language and pre-reading skills of the Title I participants in the target kindergarten classes was diagnostic and prescriptive. Based on daily classroom observation of students, teachers identified specific language and pre-reading skills needs of individual participants (using the kindergarten and reading curriculum guides as reference points). Having identified special needs, they then planned activities in which these skills could be developed. Activities included both experiences in experimental exploration (through field trips and in-class activities) and the use of a wide range of carefully selected and/or prepared materials, such as records, filmstrips, slides, tapes, picture and story books, language development games, kits, puppets, puzzles for visual disorientation and perceptual development, sequence boards, picture charts and cards, and other conversation stimulation materials.

Daily lesson plans for participants also included attention to the vocabulary to be emphasized in planned unit activities, the techniques for helping participants understand and use new words, and the methods to be applied in developing expanded and improved sentence structure in the child's daily communications.

Heavy emphasis was placed on oral language and listening skills; through daily provision for participants to hear and retell stories; play question and answer games; describe, tape, and listen to accounts of their own real experiences; create sentence stories about pictures; and engage in peer communication games.

Cameras were used to provide pictures of participants in various situations and settings which could serve as subject matter for child-developed stories about themselves, thus expanding and refining their command of language and their association of printed symbols (on labels and experience chart) with real experiences, objects, and language meanings.

Facilities, Equipment and Materials. As described above, provisions were made for a wide variety of language stimulation materials, multimedia programs, and learning aids, such as record players and records, tape recorders and tapes, filmstrips, slides, cameras, picture and story books, kits, puppets, language-development games, sequence boards, flannel board sets, puzzles for visual discrimination and perceptual development, alphabet games and cards, picture charts and cards, and other language stimulation materials.

Personnel. The regular Title I staff personnel provided support and assistance to teachers in on-site activities and inservice training. The program specialists (previously described in relation to the reading component) and the reading resource teachers in each school assisted in the ongoing development and implementation of the program. One nurse and one nurse's aide were added to the project to assure the provision of adequate health services for the preschool participants. (This brought the total of health service personnel to two nurses, two nurse's aides, and one health clerk.)

Name of System Chattanooga Public School System

Question 5. *What was the reason for using the particular supportive services listed on page 3 and in what ways did the service contribute to the outcome of the program?*

The supportive services identified and explained on page 3 of the State Report and in the section on supportive services in the narrative were chosen as those which best complement the program described in Question 4. A detailed explanation of these services is provided in the previously mentioned sections.

Name of System Chattanooga Public School System

Question 6. *Describe inservice activities and state the results of the measurement included in the objectives for inservice. If additional evaluation procedures were used for inservice, describe the results of these procedures.*

Pre-Training for Teachers

Prior to the opening of school (August 20-24), all Title I teachers were engaged in a workshop with consultants, project staff, and local curriculum specialists. The focus was on the teaching of reading and mathematics to disadvantaged students and on techniques for providing a positive and supportive learning environment for students.

The workshop included: (1) an orientation to the new proposal and a discussion of program refinements; (2) a study in depth of the continuous progress reading and mathematics curricula; and (3) teaching skills improvement activities.

Schools were clustered in three groups for initial activities, then into individual school groups. Reading resource teachers, in cooperation with principals, were responsible for faculty workshop sessions in the schools, assisted by the program specialists assigned to the school and area specialists or other systemwide personnel.

During their work sessions in their own schools, teachers were engaged in planning and preparation for the 1973-74 program. Activities were related to: (1) development of schedules for the reading and mathematics programs; (2) procedures for initial diagnosis of individual needs; and (3) specification of activities materials and progress check instruments for the first cycle.

Pre-Training for Aides

Prior to the opening of school, aides had three days of inservice training. On one of those days, aides met together without teachers to study aide duties and performances in the project. Two days were scheduled to work with the teachers in the schools. Program specialists and resource teachers were responsible for the aides' training sessions.

Continuing Training for Teachers and Aides

The school year program of inservice included the provision of five days of teacher and aide inservice as a part of ongoing program development. Based on previous experience, it has been found that better effects can be gained from flexible scheduling of some inservice during the year for relatively small groups of teachers and/or aides at a time, with the focus on needs pertinent to their own programs, rather than from large sessions for all project teachers. Good purposes have also been served by the provision of opportunities for teacher visitation and observation of programs in other schools, in and out of the city. With the emphasis on reading which characterized this project, a need was also anticipated for the time when teachers could be relieved from classroom duty for further development and refinement of the curriculum adaptations necessary for educationally deprived students.

For these purposes, the Title I director, assisted by the program specialists and mathematics resource teacher, was responsible for scheduling and conducting inservice activities during the school year. The objectives for each activity were stated for the project records and the Title I director arranged for the evaluation of outcomes. These inservice sessions were directed to the project purposes and objectives described in the proposal.

Changes in staff training necessitated by the court plan in early 1974 did little to disrupt the planned activities associated with staff training. When adjustments were needed, these were made and the program continued throughout the year with no serious problems.

Name of System Chattanooga Public School System

Question 7. *What were the characteristics of your most successful activities?*

No particular Title I activities could be judged as most successful, and certainly no Title I activities should ever be judged as least successful since each activity was designed to, and did, contribute to the total program. Certain areas within California Achievement Test results and Metropolitan Achievement Test results indicated pupil gain above the anticipated level. Selected gains made in various areas on the Continuous Progress Reading Program curriculum indicated a positive direction throughout the entire school year. The continual strengthening of the reading program and the impetus provided for the mathematics program indicated a positive direction for the year and for future years.

Name of System Chattanooga Public School System

Name of Test	Each Grade Tested	Area Tested	Pretest							Posttest						
			Date	Expected Grade Level	System Average	TI Ss N	TI Ss Scores	Non TI Ss in TI Schools N	Non TI Ss in TI Schools Scores	Date	Expected Grade Level	System Average	TI Ss N	TI Ss Scores	Non TI Ss in TI Schools N	Non TI Ss in TI Schools Scores
CAT	2	Read Voc	10/73	2.00		377	1.19			4/74	3.0		377	2.49		
CAT	2	Read Com	10/73	2.00		350	1.30			4/74	3.0		350	2.04		
CAT	2	Math Com	10/73	2.00		352	1.23			4/74	3.0		352	2.16		
CAT	2	Math Com	10/73	2.00		307	1.34			4/74	3.0		307	2.18		
CAT	3	Read Voc	10/73	3.00		315	1.71			4/74	4.0		315	2.55		
CAT	3	Read Com	10/73	3.00		313	1.92			4/74	4.0		313	2.78		
CAT	3	Math Com	10/73	3.00		320	1.93			4/74	4.0		320	2.89		
CAT	3	Math Com	10/73	3.00		319	1.91			4/74	4.0		319	2.87		
CAT	4	Read Voc	10/73	4.00		597	2.59			4/74	5.0		597	3.06		
CAT	4	Read Com	10/73	4.00		594	2.69			4/74	5.0		594	3.55		
CAT	4	Math Com	10/73	4.00		594	2.87			4/74	5.0		594	3.06		
CAT	4	Math Com	10/73	4.00		598	2.87			4/74	5.0		594	3.55		
MAT	5	Wd Knowl	10/73	5.00		498	3.20			4/74	6.0		498	4.03		
MAT	5	Reading	10/73	5.00		493	3.43			4/74	6.0		498	4.01		
MAT	5	Math Com	10/73	5.00		488	3.96			4/74	6.0		488	4.85		
MAT	5	Math Com	10/73	5.00		484	3.56			4/74	6.0		484	4.41		
MAT	5	MPS	10/73	5.00		478	3.54			4/74	6.0		478	4.34		
CAT	6	Read Voc	10/73	6.00		672	3.54			4/74	7.0		672	4.59		
CAT	6	Read Com	10/73	6.00		672	3.92			4/74	7.0		672	4.86		
CAT	6	Math Com	10/73	6.00		680	4.18			4/74	7.0		680	5.27		
CAT	6	Math Com	10/73	6.00		656	4.06			4/74	7.0		656	5.01		

Name of System Chattanooga Public School System

Question 8. *Were other Federal Agencies involved in the Title I project? If so, name them and describe the types of assistance provided by these agencies.*

Model Cities Educational Improvement Program

Planning sessions were held involving personnel in the Model Cities area responsible for planning and implementing the educational component. Three Title I schools were located in the Model Cities area and program planning involved staff members, principals, teachers, and parents in those schools receiving Model Cities and Title I funds. The Title I schools located in the Model Cities area were Avondale, Garber, and Orchard Knob Elementary. Both Model Cities and Title I efforts were focused on reading. In order to assure a coordinated effort, Model Cities and Title I staffs planned conjunctively with local curriculum personnel and the three school staffs. By agreement, the Model Cities focus continued to be on grades four through six and the Title I focus was on grades one through three.

The full services of Title I which were accorded to other eligible schools were available to all grades in the Model Cities schools (materials, field trips for students, health services, and parent involvement support). The points of grade focus were related to staff personnel in the conduct of the reading program, with the federal programs director having responsibility for coordinating their efforts in order to assure a wholeness and continuity in the total reading program for the three schools. Model Cities focused on the total program, grades four through six; Title I supported the compensatory services to specifically identified Title I students in reading and mathematics.

Human Services Department (Head Start)

During preparation of the Head Start proposal, for which Title I provides partial support, cooperative planning conferences were held with Head Start staff and representatives of the Human Services Department of the City of Chattanooga, through which Head Start was administered, in order to coordinate plans for the Head Start and Title I preschool programs.

Title III Evaluation Unit

The evaluation unit for Chattanooga Public Schools, operating under a grant from Title III, ESEA, provided continuing assistance in planning and developing the evaluation, monitoring, and feedback plan for the Title I proposal and in training Title I staff personnel in evaluation procedures.

Name of System Chattanooga Public School System

Question 9. *If private schools were involved in this project, describe the services that were provided and the number of private school children involved in each activity.*

In previous years, St. Francis and Sts. Peter and Paul Elementary Schools received Title I support. This year the two schools merged into one, now identified as the All Saints Academy. The principal at St. Francis was selected as the principal of the All Saints Academy and continuity of the program was assured. Reading and mathematics in the early grades were the major foci of the Title I program. Three aides and an amount for supplies were reflected in the budget.

These aides and materials were used in accordance with the specific program at the school. Responsibility for the conduct of the parochial school Title I component continued to rest with the principal of All Saints in a cooperative relationship with the Title I director.

Name of System Chattanooga Public School System

Question 10. *How were parents and community involved in the Title I project? Describe the various activities in which parents and community members contributed. Were mothers of Title I children employed?*

The parent involvement component of the Chattanooga Public Schools Title I program is viewed as one of its major strengths. The Policy Advisory Committee is the leadership core of the program which features a local PAC for each Title I school. These groups comprise a major force in planning, developing, and monitoring the Title I project.

Parent training activities were planned and implemented throughout the year. For example, local school personnel conducted workshops requested by parents on actual school subject matter, such as mathematics and reading, in order to "help them help their children." Arrangements were made to transport them to clinics and workshops conducted in the community which were of help to them as parents. Parent representatives participated in many of the inservice sessions and workshops for teachers.

The parent involvement services were maintained as in previous years. The parent involvement specialist was responsible for support of activities of the Central PAC, the attendance center PAC's, and general activities which were related to the Title I purposes. The purposes of the parent involvement program were to promote and maintain a high level of participation among parents of Title I schools in concerns for their children's educational progress and to assist parents in developing positive patterns of interaction with their children and with their children's teachers. Principals were responsible for providing support of this component within their schools, working in close conjunction with the parent involvement specialist. This program component was reviewed in the monthly meetings of Title I principals and problem solutions were developed.

The parent involvement specialist submitted monthly to the Title I director the following records of activities: (1) minutes of the Central PAC meetings; and (2) a Parent Activities Report for the month which included a report from each school listing the activities provided by naming the parents who participated and the amount of time spent.

For purposes of planning, coordination, and program assessment, the parent involvement specialist scheduled monthly conferences with the Title I director.

Name of System Chattanooga Public School System

Question 11. *How did the monitoring system provide feedback to persons involved in the project? Describe the effect of the monitoring system on the Title I project.*

The Title I monitoring system for school year 1973-74 centered on a planned calendar of events for all project activities and individual calendar for project personnel outlining the events taking place as the project was being implemented. This provided:

1. Assurances that the project was being implemented with fidelity to the basic commitments of the proposal.

2. A system for acquiring information needed for continuing planning and decision-making.

3. A system of self-monitoring by personnel involved in the project for the improvement of effectiveness and operational efficiency.

4. Minimal requirement of time-consuming paperwork and paper flow.

The monitoring system for individuals was derived from the Master Calendar of Events and centered on cooperative identification of tasks to be completed for effective implementation of Major Project Activities. The system included delegation of responsibility for tasks and establishment of completion dates for each activity.

At the first of each month, a calendar of major events for the coming month was distributed to each staff member having responsibility for task implementation. Each staff member recorded daily activities on the calendar as they occured. In addition to this system of self-monitoring, the project director monitored progress toward completion of major event activities by review of the monthly calendars completed by each staff member and by regularly scheduled staff meetings and conferences. Such meetings and conferences allowed for feedback to project personnel and for responsiveness to immediate and ongoing needs for maximum program effectivenss.

External monitoring for interim evaluation and final evaluation of program implementation was focused on major events and/or collection and analysis of related data, as specified by the project director in the initial request for interim evaluation services. During the 1973-74 term, further refinements were made for specification of external monitoring requirements.

Name of System Chattanooga Public School System

Question 12. *How was information regarding the project disseminated?*

Information dissemination was a major function of the role of the Title I Specialist in conjunction with the Title I Director. Types of information regularly disseminated included:

1. School lists of Title I students, maintained and reported periodically.
2. Information reports to the PAC.
3. Information reports to principals (monthly meetings).
4. Information reports to teachers.
5. Items in *The Communicator* (the Chattanooga Public Schools' public newspaper).
6. Participation in state, regional, and national meetings.
7. Information reports to project staff.
8. Information reports to the superintendent's staff.
9. Statistical and summary reports required by the State Department of Education, Title I Office.

Additional information dissemination items included: proposal and project materials shared on request with other Title I directors; news releases of Title I activities of public interest; and Title I related articles and news reports from the professional literature which had implications for the Chattanooga project efforts.

Three major documents were prepared and disseminated:

1. Title I Project Management Implementation Guide (CPRE management form).

2. Title I Policy Advisory Committee Handbook.
3. Title I Final Evaluation Report.

The parent involvement specialist was responsible for the dissemination of minutes for the PAC meetings and monthly parent activity reports.

Name of System Chattanooga Public School System

Question 13. *What were some of the problems involved in the operation of your Title I project? How were these problems resolved and how will this information be used in planning future projects?*

The major problem associated with the 1973-74 Title I program dealt with the implementation of the Federal Court order on school desegregation. This order resulted in the movement of large numbers of pupils, clustering selected schools, and closing one facility. Some Title I pupils moved to non-Title I schools, while others selected to move out of the district. Staff members were moved and materials and equipment were transferred. Occurring during the school year, the implementation of the court order caused more administrative and logistic problems than had the transfer occurred between sessions. However, no class days were lost and the Title I program proceeded smoothly for the year.

Some refinement took place in the Continuoug Progress Reading Program, but these adjustments were minor. The usual problems of new teaching staff and administrative personnel orientation were encountered, but no major difficulties emerged.

Name of System Chattanooga Public School System

Question 14. *What effect has Title I had on your regular school program? Have there been curriculum changes because of Title I? Changes in administration of the regular school program?*

Title I activities continued to provide the major focus of Continuous Progress Reading Program. Based on proven success, the program will become a basic part of the larger instructional program of the Chattanooga Public Schools and other externally funded projects.

Name of System Chattanooga Public School System

Question 15. *List recommendations that would improve the operation of Title I programs in your system.*

Rather than reading resource teachers in each school, the position might be changed to include mathematics, as well as reading, and the title changed to resource teacher. These people would continue to work in reading but would coordinate efforts in mathematics as well, and the resource teacher would simply expand her duties to include mathematics. This would involve the use of aides, allowing them to work in both areas of the curriculum where extra support is being provided.

Closer coordination between kindergarten and first grade teachers is needed. A recommendation to have the resource teacher coordinate these efforts is being made.

The amount of available funds to systems sooner than August is a recommendation. Being aware that this is not always possible where the State Department of Education has not received their allocation, it nonetheless is a definite recommendation.

NARRATIVE REPORT

TITLE I PROGRAM

GENERAL DESCRIPTION AND EVALUATION OF THE TITLE I PROGRAM

The Title I Program in Chattanooga is an integral part of the overall Chattanooga Public School System's educational program, with its primary focus on compensatory education for pupils in 11 schools in grades 1-6. Selected services are provided for kindergarten and Follow-Through classes. Demographic and test data, as detailed in other sections, were gathered on the Title I schools as part of the determination of general eligibility.

At this point it should be noted that a massive restructuring of many Chattanooga schools occurred shortly after the first of the year as a result of a Federal court order. In general, no major disruption of the program occurred, but a large shift of pupils was accomplished. Some adjustment was made in data gathering and in one reading cycle evaluation. An effort was made to carefully transfer pupil records and to account for pupils at each new location. However, some pupils elected not to remain in the system and other Title I pupils were transferred to non-Title I schools. One Title I school was closed as a result of the court order. In general, the transfer was accomplished with little disruption in the instructional program and it was "business as usual" for Title I professional staff personnel.

The decision to direct Title I support to reading and mathematics was based on a continued need to upgrade these competencies in all students. A review of standardized test scores, local reading program evaluations, expressed concern of professional staff persons and parents, and the consideration of total district instructional efforts contributed to this decision.

The criteria for the identification of student participants who were educationally deprived were:

1. All first-grade students who attained a raw score of 63 or below on Metropolitan Readiness Tests and all Head Start children.

2. All second-grade students who scored one-half year below grade level on standardized tests.

3. All third-grade students who scored one full year below grade level on standardized tests.

4. All fourth- and fifth-grade students who scored one-and-one-half years below grade level on standardized tests.

5. All sixth-grade students who scored two full years below grade level on standardized tests.

Standardized reading and/or mathematics scores were used in the identification of students.

During the school year 1972-73, Chattanooga public schools were engaged in a comprehensive assessment of learner needs for the school district conducted by the Title III, ESEA, Evaluation Unit. For this purpose, a Goal Response Questionnaire was developed on which respondents were asked to indicate their reactions to 11 learner goals which had been adopted for the school system. The questionnaire was submitted to all professional staff personnel; all students in grades 8, 10, and 12; all parents of students in grades 2, 5, 8, and 11; representatives of the community at large; school-community leaders in each elementary school community; and representatives of the news media. Respondents were asked to indicate which goals the schools "should" accomplish and which goals the schools are "now" accomplishing. Data from the questionnaire have been compiled in a school district composite and by individual schools. The goal of helping students "to apply the skills of speaking, listening, reading, writing, and mathematics" was ranked as number one in priority of what the schools "should" do in Title I schools in all but one in which it was ranked as the second priority. (The number one priority in that school related to helping students "to understand others, work cooperatively with others, and respect the rights of others to have different ideas.")

During the school year 1972-73, in connection with the development of a proposal under the Emergency School Aid Act, an extensive analysis was made of achievement data in all elementary schools. The data on achievement in Title I schools, derived from standardized tests and subtests, were reexamined in planning the Title I proposal. These data consistently confirmed the priority need for continued emphasis on reading and mathematics in the target schools.

The Title I evaluation report for school year 1972-73 and locally compiled data on pupil progress on the Continuous Progress Reading Curriculum indicated that: (1) total and consistent progress has been made in all Title I schools; and (2) the reading objectives have been met and, in most cases, exceeded in all schools. This analysis has indicated the importance of continuing the approach which was initiated last year and for which successful progress was strongly indicated among Title I participants.

A Title I, Part C, program focused on the improvement of prereading and language development, produced results which warranted the incorporation of this program into the kindergarten level for the

1973-74 year.

General Evaluation Plans

The performance objectives established by the Chattanooga Public School System for the Title I elementary schools in reading, mathematics, self-image, and responsibility provided a basis for evaluation of the Title I program for this year. These performance objectives specified the determination of levels of skill attainment gained between pre- and posttest measures of selected items of information gathered during the year. Generally, standardized tests and locally developed checklists were administered during the fall (October, 1973) and during the spring (April, 1974). The tests were administered as part of the regular Chattanooga public schools' testing program in both the fall and spring. The total system, rather than the traditional sample, was tested in the spring. Standardized procedures were used for administering the tests and these were scored by the California Testing Bureau and the State Testing and Evaluation Center in Knoxville, Tennessee.

Rather than test all pupils in each school, a statistical random sample of classrooms was used for pretest and posttest application of the Self-Image and Responsibility scales. Table 1 shows the schools and grades used for testing purposes.

The Chattanooga Public School System provides achievement tests for all elementary grades (except grade 1) each fall. The California Achievement Test is used in grades 2, 3, 4, and 6, while the Metropolitan Achievement Test is used for grade 5.

Locally developed evaluation materials included in the *Continuous Progress Reading Curriculum* were provided by the local reading and resource personnel through the Title I director's office. Data from the *Continuous Progress Reading Curriculum* were to be gathered in four cycles. However, due to the massive movement of pupils, complete school cycle evaluation data were not gathered. Data from the *Continuous Progress Reading Program* were analyzed in terms of average levels gained using initial placement and Cycle IV (end of year placement) as a unit of measurement.

Supplementary Information

While the performance objectives for the program are written in terms of grade performance, an additional section is presented on the results of *Continuous Progress Reading Program* data for other grade levels. A similar presentation is made for results of standardized test data not used as part of a performance objective. Special reports were provided by personnel from supportive services and their analyses are included in a separate section of this report. Comparisons were made according to each performance objective in terms which were dictated by the objective's level of expectation. A performance objective generally follows a grade level distribution and the results of the data for each section are included accordingly.

TABLE 1

THE SCHOOLS AND GRADES USED FOR TESTING PURPOSES

School	Grades Tested
Avondale	1, 2, 3, 4, 5, 6
Bell	2, 4, 6
Carpenter	3
Garber	3, 5, 6,
Henry	2, 4, 5
Highland Park	1, 3, 4
Howard	1, 2, 3, 4, 5, 6
Orchard Knob	1, 2, 3, 4, 5, 6
Piney Woods	1, 5
Ridgedale	2, 6
Trotter (closed Winter 1974)	1

PERFORMANCE OBJECTIVES

Kindergarten - Readiness

1. Upon completion of the eighth school month, at least 51 percent of the Title I participants in the kindergarten classes will display cognitive behavior pertaining to readiness skills by attaining a score of 63 as measured by the Metropolitan Readiness Test (post-test).

Data showing the results of the kindergarten pupils Metropolitan Readiness Test analysis appear in Table 2. These data include the means, standard deviations, and number of observations for the total score and for each subtest of the MRT.

These results show an average score of 49.44 for the total group, 49.44 for male pupils and 50.96 for females. The sample size was 847 total, 404 males and 443 females.

The scores for the total population ranged from 2 to 95 with a median score of 50.00. These data further show 24.6 percent scored at 63 or above, while 75.4 scored scored less than 63.

Therefore, this objective was not met.

TABLE 2

MEAN, STANDARD DEVIATIONS AND NUMBER OF OBSERVATIONS FOR METROPOLITAN READINESS TEST FOR KINDERGARTEN PUPILS

Subtest	Mean	Std. Dev.	Number
Word Meaning			
Total	7.68	3.10	840
Male (1)	7.70	3.12	400
Female (2)	7.67	3.10	440
Listening			
Total	9.86	2.53	837
Male	9.76	2.47	398
Female	9.95	2.58	439
Matching			
Total	6.98	3.15	808
Male	6.70	3.04	383
Female	7.23	3.23	425
Alphabet			
Total	10.15	4.56	810
Male	9.76	4.50	383
Female	10.49	4.59	427
Numbers			
Total	11.37	4.93	815
Male	10.81	4.83	391
Female	11.90	4.97	424
Copying			
Total	5.55	2.81	727
Male	5.32	2.75	338
Female	5.45	2.85	389
Total Score			
Total	49.44	17.63	847
Male	47.78	17.37	404
Female	50.96	17.76	443

TABLE 2 (CONT.)

Draw-A-Man

	Male Number/%	Female Number/%	Total Number/%
A	15/3.9	42/9.8	57/7.0
B	68/17.5	105/24.4	173/21.1
C	111/28.5	113/16.3	224/27.4
D	105/27.0	111/25.8	216/26.4
E	90/23.1	59/13.7	149/18.2
Total	289/47.5	430/52.5	

First Through Sixth Grade--Reading

2. *Upon completion of the eighth school month, first grade Title I students will demonstrate the application of reading skills, as evidenced by an advance, on the average, of 1.5 levels on the Continuous Progress Reading Curriculum for Chattanooga Public Schools, as measured by the Continuous Progress Reading Diagnostic Instruments.*

Data in Table 3 show the number and percent by CPRC level of initial and end-of-year placement for Title I pupils in grade 1. The data in Table 4 show the Title I pupil distribution by reading level for grade 1 for the 1973-74 year.

Data from the first table show an average initial placement level of 1.05 and an end-of-year average placement of 2.52. These data also show an average gain of 1.5 levels for grade 1 pupils.

Therefore, this objective was met.

TABLE 3

NUMBER AND PERCENT BY CPRC LEVEL OF INITIAL AND END-OF-YEAR PLACEMENT OF INTACT PUPILS--GRADE 1

Level	Initial Placement		End-of-Year	
	Number	Percent	Number	Percent
I	338	97.1%	49	14.1%
II	5	1.4	134	38.5
III	3	0.8	105	30.2
IV	2	0.5	54	15.5
V	0	0.0	6	1.7
Total	348	99.8%	348	100.0%

TABLE 4

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADE 1 PUPILS

Beginning of Cycle Date		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	372	49	133	99	51	6							338	- 34
II	5		1	3	1								5	
III	5			2	1								3	- 2
IV	2			1	1									- 1
V	1													- 1
VI														
VII														
VIII														
IX														
X														
XI														
Distribution Of Pupils End of Cycle		49	134	105	54	6							348	- 37

3. *Upon completion of the eighth school month, second grade Title I students will demonstrate the application of reading skills, as evidenced by an advance, on the average, of one level on the Continuous Progress Reading Curriculum for Chattanooga Public Schools, as measured by the Continuous Progress Reading Diagnostic Instruments.*

Data in Table 5 show the number and percent by CPRC level of initial and end-of-year placement for Title I pupils in grade 2. The data in Table 6 show the Title I pupil distribution by reading level for grade 2 for the 1973-74 year.

Data from the first table show an average initial placement level of 2.59 and an end-of-year average placement of 3.98. These data also show an average gain of 1.4 levels for grade 2 pupils.

Therefore, this objective was met.

TABLE 5

NUMBER AND PERCENT BY CPRC LEVEL OF INITIAL AND END-OF-YEAR PLACEMENT OF INTACT PUPILS--GRADE 2

	Initial Placement		End-of-Year	
Level	Number	Percent	Number	Percent
I	22	8.4%	7	2.7%
II	118	44.9	23	8.7
III	80	30.4	61	23.2
IV	32	12.2	98	37.3
V	11	4.2	40	15.2
VI	0	0.0	20	7.6
VII	0	0.0	13	4.9
VIII	0	0.0	1	0.4
Total	263	100.1%	263	100.0%

TABLE 6

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADE 2 PUPILS

Beginning of Cycle Data		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	27	6	9	2	4		1						22	- 5
II	136	1	11	40	51	12	3						118	- 18
III	91		3	11	36	18	8	4					80	- 11
IV	37			8.	7	8	4	5					32	- 5
V	11					2	4	4	1				11	
VI														
VII														
VIII														
IX														
X														
XI														
Distribution Of Pupils End of Cycle		7	23	61	98	40	20	13	1				263	- 39

4. *Upon completion of the eighth school month, the third grade Title I student will demonstrate cognitive behavior of reading skills, as evidenced by an advance, on the average, of one level on the Continuous Progress Reading Curriculum for Chattanooga Public Schools, as measured by the Continuous Progress Reading Diagnostic Instruments.*

Data in Table 7 show the number and percent by CPRC level of initial and end-of-year placement for Title I pupils in grade 3. The data in Table 8 show the Title I pupil distribution by reading level for grade 3 for the 1973-74 year.

Data from the first table show an average initial placement level of 3.91 and an end-of-year average placement of 5.35. These data also show an average gain of 1.4 levels for grade 3 pupils.

Therefore, this objective was met.

TABLE 7

NUMBER AND PERCENT BY CPRC LEVEL OF INITIAL AND END-OF-YEAR PLACEMENT OF INTACT PUPILS--GRADE 3

	Initial Placement		End-of-Year	
Level	Number	Percent	Number	Percent
I	1	0.4%	1	0.4%
II	38	17.0	3	1.3
III	46	20.5	33	14.7
IV	60	26.8	54	24.1
V	62	27.7	38	17.0
VI	8	3.6	26	11.6
VII	9	4.0	29	12.9
VIII	0	0.0	33	14.7
IX	0	0.0	7	3.1
Total	224	100.0%	224	99.8%

TABLE 8

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADE 3 PUPILS

Beginning of Cycle Data		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	1	1											1	
II	45		3	18	8	5	1	2	1				38	- 7
III	53			4	28	7	2	5					46	- 7
IV	64			11	15	12	15	4	3				60	- 4
V	73				3	14	7	10	23	5			62	- 11
VI	8							8					8	
VII	9						1		6	2			9	
VIII														
IX														
X														
XI														
Distribution Of Pupils End of Cycle		1	3	33	54	38	26	29	33	7			224	- 29

5. *Upon completion of the eighth school month, a sample of fourth-grade Title I students will show an average gain of six months (grade equivalent) in reading comprehension, as measured by the California Achievement Test (Level 2 Form A) Reading Comprehension Subtest (pre- post).*

Data in Table 9 show the results of pre-test and post-test analysis for grade 4 pupil data on selected sub-tests of the California Achievement Test. These data show a gain score for Reading Vocabulary of 0.47 years with a pre-test mean of 2.59 and a post-test mean of 3.06. These data show a gain of approximately one-half year on Vocabulary.

A breakdown of the responses on the Reading Vocabulary sub-test shows 50.3 percent of the respondents (300) gained 0.50 years or more for the year, while 49.7 percent (297) showed a gain of less than 0.50 years.

Based on the anticipated gain of six months or 0.50 years, the objective was not met. However, more than 50 percent of the participants gained more than the desired 0.50 years.

TABLE 9

MEANS, STANDARD DEVIATIONS, CHANGE SCORES AND NUMBER OF OBSERVATIONS FOR READING SCORES ON SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST FOR GRADE 4 TITLE I PUPILS

SUBJECT	MEAN	STD. DEV.	PRE TO POST	NO. OF OBS.
Reading Voc.				
Pre-Test	2.59	1.37	0.47	597
Post-Test	3.06	1.43		
Reading Comprehension				
Pre-Test	2.69	1.38	0.88	594
Post-Test	3.55	1.73		

6. *Upon completion of the eighth school month, a sample of fourth-grade Title I students will show an average gain of six months (grade equivalent) in knowledge of reading vocabulary, as measured by the California Achievement Test (Level 2 Form A) Reading Vocabulary Sub-test (pre- post).*

Data in Table 9 (page 67) shows the results of the pre-test and post-test analysis for grade and pupil data on the Reading Comprehension subtest. These data show a gain of 0.88 years with a pre-test mean of 2.69 and a post-test mean of 3.55. This change score represents a gain in excess of the anticipated 0.50 years for this objective. Additional analysis shows 63.8 percent (379) of the pupils scored gains of 0.50 years or greater while 26.2 percent (2.5) scored gains of less than 0.50 years.

This objective was met.

7. *Upon completion of the eight school month, a sample of sixth-grade Title I students will show an average gain of six months (grade equivalent) in reading comprehension as measured by the California Achievement Test (Level 3 Form A) - Comprhension Sub-test (pre- post).*

Data in Table 10 shows the results of selected subtest of the California Achievement Test. These data show a gain of 0.92 on the Reading Comprehension sub-test with a pre-test mean of 3.92 and a post-test mean of 4.86. This change score represents a gain in excess of the anticipated 0.50 years for this objective. An additional analysis shows that 63.2 percent (425) of the pupils socred gains of 0.50 years or greater, while 36.8 percent (247) scored gains of less than 0.50 years.

This objective was met both in the anticipated gain score of greater than 0.50 years, as well as in having more than 50 percent of the respondents scoring 0.50 or greater.

TABLE 10

MEANS, STANDARD DEVIATIONS, CHANGE SCORES AND NUMBER OF OBSERVATIONS FOR READING SCORES ON SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST FOR GRADE 6 TITLE I PUPILS

SUBJECT	MEAN	STD. DEV.	CHANGE: PRE TO POST	NUMBER OF OBS.
Reading Vos.				
Pre-Test	3.54	1.87	1.04	672
Post-Test	4.59	2.05		
Reading Comprehension				
Pre-Test	3.92	1.88	0.92	672
Post-Test	4.86	2.17		

8. *Upon completion of the eighth school month, a sample of sixth-grade Title I students will show an average gain of six months (grade equivalent) in knowledge of reading vocabulary as measured by the California Achievement Test (Level 3 Form A) - Reading Vocabulary Sub-test (pre- post).*

Data in Table 10 (page 69) shows the results of the pre-test and post-test analysis for Grade 6 pupil data on the Reading Vocabulary Subtest of the California Achievement Test. These data show a gain score for Reading Vocabulary of 1.04 years with a pre-test mean of 3.54 and a post-test mean of 4.59. These data show a pupil gain of slightly more than one year on Vocabulary during the sixth grade period of instruction.

A breakdown of responses on the Reading Vocabulary Subtest shows 72.5 percent of the respondents (487) gained 0.50 years or more for the year, while 27.5 percent (185) showed a gain of less than 0.50 years.

Based on the anticipated gain of six months or 0.50 years, the objective was met. Additionally, more than 50 percent of the participants gained more than the desired 0.50 years at this grade level on this subtest.

9. *Upon completion of the eighth school month, a sample of fifth-grade Title I students will demonstrate an average gain of six months (grade equivalent) in knowledge of vocabulary as measured by the Metropolitan Achievement Test (Intermediate) - Word Knowledge Sub-test (pre- post).*

Data in Table 11 shows the results of pre-test and post-test analysis for Grade 5 pupil data on selected subtests of the Metropolitan Achievement Test. These data show a change score for Word Knowledge of 0.84 years with a pre-test mean of 3.20 and a post-test mean of 4.03. This gain score of 0.84 when compared to the anticipated growth of 0.50 years shows that the objective was met. An additional analysis of these data indicate that 56.6 percent (282) of the respondents scored 0.50 years or greater, while 43.4 percent (216) scored less than the desired 0.50 years gain.

Based on the anticipated gain of six months or 0.50 years, the objective was met in terms of average score and also in terms of having more than 50 percent of the respondents scoring 0.50 years gain or more.

TABLE 11

MEANS, STANDARD DEVIATIONS, CHANGE SCORE AND NUMBER OF OBSERVATIONS FOR READING SCORES ON THE METROPOLITAN ACHIEVEMENT TESTS FOR GRADE 5 TITLE I PUPILS

SUBJECT	MEAN	STD. DEV.	CHANGE: PRE TO POST	NUMBER OF OBS.
Word Knowledge				
Pre-Test	3.20	0.97	0.84	498
Post-Test	4.03	1.47		
Reading				
Pre-Test	3.43	1.00	0.57	493
Post-Test	4.01	1.51		
Total Reading				
Pre-Test	3.21	0.94	0.74	499
Post-Test	3.95	1.42		

10. *Upon completion of the eighth school month, a sample of fifth-grade Title I students will demonstrate an average gain of six months (grade equivalent) in reading comprehension as measured by the Metropolitan Achievement Test (intermediate) - Reading Sub-test (pre- post).*

Data in Table 11 (page 71) shows the results of the pre-test and post-test analysis for Grade 5 pupil data on the Reading Subtest of the Metropolitan Achievement Test. These data show a change score of 0.57 years for the group with a pre-test mean of 3.43 and a post-test mean of 4.01. The change score represents a gain in excess of the anticipated 0.50 years for this objective. In this analysis additional data show 49.9 percent (246) of the respondents scored 0.50 years or better, while 50.1 percent (247) of the pupils scored less than 0.50 years gain.

Based on the analysis of the data the objective was met in terms of average increase in excess of 0.50 years, but was not met in terms of having 50 percent of the population scoring greater than 0.50 years gain.

First through Sixth Grade--Mathematics

11. *First grade Title I students, upon completion of the eighth school month, will display cognitive behavior related to mathematics skills, as evidenced by an advance, on the average, of 1.5 levels on the Continuous Progress Mathematics Curriculum for Chattanooga Public Schools, as measured by the McKeldin Math Evaluation Checklist.*

Data in Table 12 indicate that initial level and end-of-year level for grade 1 pupils on the McKeldin Math Evaluation Checklist. Usable data for individual classroom teachers served as the basis for this evaluation and for Objectives 12 and 13. These data show an average gain of 0.93 levels.

Therefore, this objective was not met.

TABLE 12

PUPIL PROGRESS IN MATHEMATICS--FIRST GRADE

Initial Level	End-of-Year Level I	II	III	IV	V	VI
I	38	36	27	31	0	0
II	2	33	18	34	16	4
III	5	28	60	81	11	0
IV	0	0	0	1	0	1

12. *Second grade Title I students, upon completion of the eighth school month, will demonstrate the application of mathematics skills, as evidenced by an advance, on the average, of one level on the Continuous Progress Mathematics Curriculum for Chattanooga Public Schools, as measured by the McKeldin Math Evaluation Checklist.*

Data in Table 13 indicate the initial level and end-of-year level for grade 2 pupils on the McKeldin Math Evaluation Checklist. These data show an average gain of 1.04 years.

Therefore, the objective was met.

TABLE 13

PUPIL PROGRESS IN MATHEMATICS--SECOND GRADE

Initial Level	End-of-Year Level						
	I	II	III	IV	V	VI	VII
I	4	7	1	0	2	6	0
II	0	16	8	14	14	14	0
III	0	0	37	10	23	15	1
IV	0	1	5	2	14	14	1
V	1	0	12	22	25	52	9
VI	0	0	0	0	0	2	4

13. *Third grade Title I students, upon completion of the eighth school month, will display cognitive behavior pertaining to mathematics skills, as evidenced by an advance, on the average, of one level on the Continuous Progress Mathematics Curriculum for Chattanooga Public Schools, as measured by the McKeldin Math Evaluation Checklist.*

Data in Table 14 indicate the initial level and end-of-year level for a sample of grade 3 pupils. These data were obtained from usable teacher-supplied data on computational skills. These sample data represented data from across the school system. These data show an average gain of 2.4 levels.

Therefore, the objective was met.

TABLE 14

PUPIL PROGRESS IN MATHEMATICS--THIRD GRADE

Initial Level	End-of-Year Level							
	IV	V	VI	VII	VIII	IX	X	XI
II	0	1	0	0	0	0	0	0
III	0	0	0	0	0	0	0	0
IV	1	1	2	0	0	0	0	0
V	0	1	4	1	0	0	1	0
VI	0	0	0	3	5	1	5	2
VII	0	0	0	0	0	2	5	3
VIII	0	0	0	0	0	0	1	1
IX	0	0	0	0	0	0	1	0

14. *Upon completion of the eighth school month, a sample of fourth-grade Title I students will demonstrate application of computational skills in mathematics by attaining an average gain of six months (grade equivalent), as measured by the California Achievement Test (Level 2 Form A) - Mathematics Computation Sub-Test (pre- post).*

Data in Table 15 shows the results of the pre-test and post-test analysis for grade 4 pupil data on selected mathematics subtests of the California Achievement Test. This table provides data showing a change score for the computation subtest of 0.77 years with a pre-test mean of 2.87 and a post-test mean of 3.06. Additional analyses of these data show 74.6 percent (507) pupils scored gains of 0.50 or greater, while 25.4 percent (173) scored less than 0.50 years gain.

Based on the anticipated gain of 0.50 and/or more than 50 percent of the pupils gaining more than 0.50 years, the objective was met.

TABLE 15

MEANS, STANDARD DEVIATIONS, CHANGE SCORES AND NUMBER OF OBSERVATIONS FOR MATHEMATICS SCORES ON SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST FOR GRADE 4 TITLE I PUPILS

	MEAN	STD. DEV.	CHANGE: PRE TO POST	NUMBER OF OBS.
Math Computations				
Pre-Test	2.87	0.97	0.77	594
Post-Test	3.06	1.44		
Math Concepts and Problem Solving				
Pre-Test	2.87	1.38	0.82	598
Post-Test	3.55	1.74		

15. *Upon completion of the eighth school month, a sample of fourth-grade Title I students will display comprehension related to mathematics concepts by attaining an average gain of six months (grade equivalent), as measured by the California Achievement Test (Level 2 Form A) - Mathematics Concepts Sub-Test (pre- post).*

Data in Table 15 (page 76) shows the results of the Mathematics Concepts and Problem Solving subtest for grade 4 pupils. These data show a change score of 0.82 years with a pre-test mean of 2.87 and a post-test mean of 3.55. Additional analysis of these data show 69.6 percent (416) pupils made gains in excess of the desired 0.50 years gain.

Based on these data, this objective was met.

16. Upon completion of the eighth school month, a sample of fourth-grade Title I students will demonstrate application of mathematics problem solving by scoring an average gain of six months (grade equivalent), as measured by the California Achievement Test (Level 2 Form A) - Mathematics Problems Sub-Test.

These data are covered as part of the previous subtest.

17. *Upon completion of the eighth school month, a sample of sixth-grade Title I students will demonstrate application of computational skills in mathematics by attaining an average gain of six months (grade equivalent), as measured by the California Achievement Test (Level 3 Form A) - Mathematics Computation Sub-Test (pre- post).*

Data in Table 16 presents the means, standard deviations, change scores, and number of observations for selected mathematics subtests of the California Achievement Test for grade 6 Title I pupils. These data show that a change score of 1.10 years was recorded on Mathematics Computation Subtest for grade 6 Title I pupils. The pre-test mean score was 4.18 and the post-test mean score was 5.27. Additional analyses indicated that 74.6 percent (506) of the respondents scored 0.50 years or more gain on this subtest.

These data show this objective was met.

TABLE 16

MEANS, STANDARD DEVIATION, CHANGE SCORES AND NUMBER OF OBSERVATIONS FOR MATHEMATICS SCORES ON SELECTED SUBTEST OF THE CALIFORNIA ACHIEVEMENT TEST FOR GRADE 6 TITLE I PUPILS

	MEAN	STD. DEV.	CHANGE: PRE TO POST	NUMBER OF OBS.
Math Computations				
Pre-Test	4.18	1.38	1.10	680
Post-Test	5.27	1.82		
Math Concepts and Problem Solving				
Pre-Test	4.06	1.71	0.97	656
Post-Test	5.01	2.08		

18. *Upon completion of the eighth school month, a sample of sixth-grade Title I students will demonstrate comprehension related to mathematics concepts by attaining an average gain of six months (grade equivalent), as measured by the California Achievement Test (Level 3 Form A) - Mathematics Concepts and Problem Solving Subtest (pre- post).*

Data in Table 16 (page 79) provides information on the Mathematics Concepts and Problem Solving Subtest for grade 6 Title I pupils on the California Achievement Test. These data show the Mathematics Concepts and Problem Solving gain score to be 0.97 years with a pre-test mean of 4.06 and a post-test mean of 5.01. These data also indicated that 69.2 percent (454) of the respondents scored greater than 0.50 years gain on this particular subtest.

The results of these data analyses indicate this objective was met.

19. *Upon completion of the eighth school month, a sample of sixth-grade Title I students will display application of problem solving in mathematics by attaining an average gain of six months (grade equivalent), as measured by the California Achievement Test (Level 3 Form A) - Mathematics Problems Sub-Test.*

These data are covered as a part of the previous subtest.

20. *Upon completion of the eighth school month, a sample of fifth-grade Title I students will display application of computational skills in mathematics by attaining an average gain of six months (grade equivalent), as measured by the Metropolitan Achievement Test (Intermediate) - Mathematics Computation Sub-Test (pre- post).*

Data in Table 17 provides the means, standard deviations, change scores, and number of observations for Mathematics scores on Metropolitan Achievement Test for grade 5 Title I pupils. These data indicate that the Mathematics Computation Subtest produced a gain score of 0.91 years for fifth grade pupils. This represented a pre-test mean of 3.96 and a post-test mean of 4.85. Additional analysis indicated that 60.5 percent of the respondents (295) scored 0.50 years or greater on this subtest.

Based on these data this objective was met.

TABLE 17

MEAN, STANDARD DEVIATIONS, CHANGE SCORES AND NUMBER OF OBSERVATIONS FOR MATHEMATICS SCORES ON THE METROPOLITAN ACHIEVEMENT TEST FOR GRADE 5 TITLE I PUPILS

	MEAN	STD. DEV.	CHANGE: PRE TO POST	NUMBER OF OBS.
Math Computations				
Pre-Test	3.96	0.83	0.91	488
Post-Test	4.85	1.16		
Math Concepts				
Pre-Test	3.56	0.76	0.85	484
Post-Test	4.41	1.41		
Math Problem Solving				
Pre-Test	3.54	0.85	0.79	478
Post-Test	4.34	1.34		
Total Math				
Pre-Test	3.61	0.79	0.84	500
Post-Test	4.46	1.22		

21. *Upon completion of the eighth school month, a sample of fifth-grade Title I students will display comprehension related to mathematics concepts by attaining an average gain of six months (grade equivalent), as measured by the Metropolitan Achievement Test (Intermediate) - Mathematics Concepts Sub-Test (pre- post).*

Data in Table 17 (page 82) shows the Mathematics Concept Subtest of the Metropolitan Achievement Test for Grade 5 Title I pupils produced a gain score of .85 years. The pre-test mean was 3.56 and the post-test mean was 4.41. Additional analyses of these data show 57.4 percent (278) of the respondents scored 0.50 years gain or greater.

Based on the anticipated gain of 0.50 years growth and more than 50 percent of the population scoring 0.50 years or better, this objective was met.

22. *Upon completion of the eighth school month, a sample of fifth-grade Title I students will display application of problem solving in mathematics by attaining an average gain of six months (grade equivalent), as measured by the Metropolitan Achievement Test (Intermediate) - Mathematics Problem Solving Sub-Test.*

Mathematics Problem Solving Subtest data, appearing in Table 17 (page 82), indicates a gain score or change value of 0.79 years for Title I fifth grade pupils. The pre-test mean was 3.54 and the post-test mean was 4.34. Additional analyses of these data indicated that 50.4 percent of the respondents scored 0.50 years or greater on this particular subtest. Based on these results this objective was met.

23. *Upon completion of the eighth school month, a sample of Title I students (grades 1-6) will display a value of self as evidenced by a positive change on 10 percent of the items appearing on the Ray Self-Image Checklist - Revised (pre- post).*

Data in Table 18 to 23 presents the results of the Self-Image Checklist. These tables present data on the number of pupils responding "yes" to the pre-test and the number of pupils responding "yes" to post-test. The absolute increase of "yes" responses was chosen as the measure of increase. The tables provide an indication by grade level of increase or decrease in responses to the items.

These data show only selected instances where the change represented an increase of 10 percent as called for in the objective. Grade 2 data provided the largest number of items meeting the anticipated increase, while grade 3 data provided the lowest number of positive changes on the Self-Image Checklist.

TABLE 18

Pre-test and Post-test Positive Responses and Change Scores for the Self-Image Checklist for Grade 1 Pupils

ITEM	PRE YES	POST YES	INCREASE	≥10%
1. I feel left out of things in class.	49	56	7	x
2. I am an important person to my classmates.	90	77	-13	
3. My classmates like me.	91	93	2	
4. I find it easy to get along with my classmates.	87	81	-6	
5. I often know the answer before the rest of the class.	82	68	-14	
6. I feel good about my school work.	93	90	-3	
7. I get scared when I'm called on in class.	51	46	-5	
8. I get my work done on time.	77	83	6	
9. It is easy for me to stand up in front of the class and tell them something.	80	79	-1	
10. I do my school work without being told more than once.	84	82	-2	
11. I usually like to go to school.	99	82	-17	
12. When school work is hard, I usually give up.	58	39	-19	
13. Most kids are smarter than I am.	53	56	3	
14. I find it hard to talk to classmates.	47	51	4	
15. Most of my best friends are in this class.	88	87	-1	
16. I have trouble learning.	64	59	-5	
17. I usually understand a story the first time I read it.	84	80	-4	
18. I can figure things out for myself.	86	82	-4	
19. I like the kids in this class very much.	101	101	0	
20. I like to start work on new things.	113	102	-11	

TABLE 19

Pre-test and Post-test Positive Responses and Change Scores for the Self-Image Checklist for Grade 2 Pupils

ITEM	PRE YES	POST YES	INCREASE	≥10%
1. I feel left out of things in class.	46	37	-9	
2. I am an important person to my classmates.	74	75	1	
3. My classmates like me.	84	97	13	x
4. I find it easy to get along with my classmates.	76	78	2	
5. I often know the answer before the rest of the class.	62	46	-16	
6. I feel good about my school work.	83	92	9	x
7. I get scared when I'm called on in class.	30	37	7	x
8. I get my work done on time.	63	73	10	x
9. It is easy for me to stand up in front of the class and tell them something.	85	82	-3	
10. I do my school work without being told more than once.	71	68	-3	
11. I usually like to go to school.	91	87	-4	
12. When school work is hard, I usually give up.	43	40	-3	
13. Most kids are smarter than I am.	63	66	3	
14. I find it hard to talk to classmates.	46	35	-11	
15. Most of my best friends are in this class.	91	82	-9	
16. I have trouble learning.	51	53	2	
17. I usually understand a story the first time I read it.	83	84	1	
18. I can figure things out for myself.	74	85	11	x
19. I like the kids in this class very much.	96	94	-2	
20. I like to start work on new things.	100	102	2	

TABLE 20

Pre-test and Post-test Positive Responses and Change Scores for the Self-Image Checklist for Grade 3 Pupils

	ITEM	PRE YES	POST YES	INCREASE	≥10%
1.	I feel left out of things in class.	40	31	-9	
2.	I am an important person to my classmates.	81	84	3	
3.	My classmates like me.	99	100	1	
4.	I find it easy to get along with my classmates.	94	91	-3	
5.	I often know the answer before the rest of the class.	50	46	-4	
6.	I feel good about my school work.	93	96	3	
7.	I get scared when I'm called on in class.	39	29	-10	
8.	I get my work done on time.	74	79	5	
9.	It is easy for me to stand up in front of the class and tell them something.	81	77	-4	
10.	I do my school work without being told more than once.	78	74	-4	
11.	I usually like to go to school.	100	95	-5	
12.	When school work is hard, I usually give up.	42	33	-9	
13.	Most kids are smarter than I am.	69	73	4	
14.	I find it hard to talk to classmates.	44	27	-17	
15.	Most of my best friends are in this class.	89	99	-10	
16.	I have trouble learning.	60	43	-17	
17.	I usually understand a story the first time I read it.	91	79	-12	
18.	I can figure things out for myself.	88	88	0	
19.	I like the kids in this class very much.	100	104	4	
20.	I like to start work on new things.	111	110	-1	

TABLE 21

Pre-test and Post-test Positive Responses and Change Scores for the Self-Image Checklist for Grade 4 Pupils

ITEM	PRE YES	POST YES	INCREASE	≥10%
1. I feel left out of things in class.	33	22	-11	
2. I am an important person to my classmates.	69	50	-19	
3. My classmates like me.	97	101	4	
4. I find it easy to get along with my classmates.	79	85	6	
5. I often know the answer before the rest of the class.	49	32	-17	
6. I feel good about my school work.	103	96	-7	
7. I get scared when I'm called on in class.	34	31	-3	
8. I get my work done on time.	68	63	-5	
9. It is easy for me to stand up in front of the class and tell them something.	75	59	-16	
10. I do my school work without being told more than once.	70	73	3	
11. I usually like to go to school.	92	86	-6	
12. When school work is hard, I usually give up.	28	37	9	x
13. Most kids are smarter than I am.	76	76	0	
14. I find it hard to talk to classmates.	37	29	-8	
15. Most of my best friends are in this class.	87	90	-3	
16. I have trouble learning.	51	49	-2	
17. I usually understand a story the first time I read it.	84	67	-17	
18. I can figure things out for myself.	86	78	-8	
19. I like the kids in this class very much.	86	92	6	
20. I like to start work on new things.	106	109	3	

TABLE 22

Pre-test and Post-test Positive Responses and Change Scores for the Self-Image Checklist for Grade 5 Pupils

ITEM	PRE YES	POST YES	INCREASE	≥10%
1. I feel left out of things in class.	32	21	-11	
2. I am an important person to my classmates.	41	58	17	x
3. My classmates like me.	93	99	6	
4. I find it easy to get along with my classmates.	82	86	4	
5. I often know the answer before the rest of the class.	33	30	-3	
6. I feel good about my school work.	96	102	6	
7. I get scared when I'm called on in class.	41	30	-9	
8. I get my work done on time.	61	57	-4	
9. It is easy for me to stand up in front of the class and tell them something.	54	57	3	
10. I do my school work without being told more than once.	72	76	4	
11. I usually like to go to school.	103	104	1	
12. When school work is hard, I usually give up.	35	21	-14	
13. Most kids are smarter than I am.	95	88	-7	
14. I find it hard to talk to classmates.	37	25	-12	
15. Most of my best friends are in this class.	86	90	4	
16. I have trouble learning.	53	43	-10	
17. I usually understand a story the first time I read it.	63	74	11	x
18. I can figure things out for myself.	73	72	-1	
19. I like the kids in this class very much.	93	98	5	
20. I like to start work on new things.	109	112	3	

TABLE 23

Pre-test and Post-test Positive Responses and Change Scores for the Self-Image Checklist for Grade 6 Pupils

ITEM	PRE YES	POST YES	INCREASE	≥10%
1. I feel left out of things in class.	32	38	6	x
2. I am an important person to my classmates.	53	47	-6	
3. My classmates like me.	115	110	-5	
4. I find it easy to get along with my classmates.	103	110	7	
5. I often know the answer before the rest of the class.	42	52	10	x
6. I feel good about my school work.	129	116	-13	
7. I get scared when I'm called on in class.	59	52	-7	
8. I get my work done on time.	95	82	-13	
9. It is easy for me to stand up in front of the class and tell them something.	58	63	5	
10. I do my school work without being told more than once.	81	86	5	
11. I usually like to go to school.	131	114	-17	
12. When school work is hard, I usually give up.	37	37	0	
13. Most kids are smarter than I am.	97	102	5	
14. I find it hard to talk to classmates.	29	37	8	x
15. Most of my best friends are in this class.	102	102	0	
16. I have trouble learning.	69	55	-14	
17. I usually understand a story the first time I read it.	88	87	-1	
18. I can figure things out for myself.	99	90	-9	
19. I like the kids in this class very much.	98	103	5	
20. I like to start work on new things.	142	136	-6	

24. *Upon completion of the eighth school month, a sample of Title I students (grades 1-6) will demonstrate a value toward self-directed behavior in the learning process and social setting of the school, as measured by the Ray Performance Scale (Revised), showing a 10 percent increase in total score (pre- post).*

Means, standard deviations, number of observations and change scores for pre-test and post-test results on the Performance Scale for the total population and for each grade are presented in Table 24. The Performance Scale was administered to randomly selected pupils across the system. Provision was made for selection from all grades and from all types of schools. Only matched data (pre and post) were used in the final analysis.

These data show a change of 2.44 for the total population and changes of 2.64, 3.40, 2.00, 1.03, 3.09 and 1.61 for grades 1-6. In each analysis the change was positive, but in no instance did the gain reach the desired 10 percent increase in total score.

Therefore, this objective was not met.

TABLE 24

MEANS, STANDARD DEVIATION, CHANGE SCORE AND NUMBER OF OBSERVATIONS FOR RESULTS OF PERFORMANCE SCALE FOR TOTAL POPULATION AND BY GRADE

Group	Mean	Std. Dev.	Number	Change Score
Pre-test	37.75	9.69	138	2.44
Post-test	40.19	10.21		
Grade 1				
Pre-test	36.68	10.28	19	2.64
Post-test	39.32	11.60	19	
Grade 2				
Pre-test	35.40	8.16	25	3.40
Post-test	38.80	11.99	25	
Grade 3				
Pre-test	39.30	8.49	23	2.00
Post-test	41.30	9.74	23	
Grade 4				
Pre-test	37.79	10.64	19	1.63
Post-test	39.42	9.48	19	
Grade 5				
Pre-test	37.79	8.92	24	3.09
Post-test	41.08	8.78	24	
Grade 6				
Pre-test	39.25	11.61	28	1.61
Post-test	40.86	10.20	28	

ADDITIONAL ANALYSES

Composite Reading Analysis

The data for the composite analysis of reading scores from all grades (1-6) in the Chattanooga Public Schools' *Continuous Progress Reading Curriculum* are presented in Table 25. These data show the results of the total year's effort for all Title I schools and indicate only 38 pupils from a grand total of 1,913 were placed at a lower position in the curriculum at the end of the year than at the beginning of the year.

The data are presented with initial placement down the left side of the table and final placement across the top of the figure. These data show, for example, that 57 pupils who were placed at Level I at initial placement remained at that level. Additionally, the data show that 144 pupils progressed from Level I to Level II at final placement, 102 progressed from Level I to Level III, 55 progressed from Level I to Level IV, seven progressed from Level I to Level V, and one progressed from Level I to Level VI. A second illustration shows that one pupil was initially placed at Level IV but was lowered to Level II at final evaluation.

A detailed study of the table shows that all pupils to the right of the heavy black line diagonally from upper left to lower right on the chart progressed at least one level. Using data from the first illustration, 144 pupils who were at Level I progressed one level (to Level II), 102 pupils who were at Level I progressed two levels (to Level III), 55 pupils who were at Level I progressed three levels (to

TABLE 25

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADES 1-6 PUPILS

Beginning of Cycle Data		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	406	57	144	102	55	7	1						366	- 40
II	270	1	22	79	84	29	11	2	2	1			231	- 39
III	265		7	20	89	58	44	16	1				235	- 30
IV	299		1	21	46	82	69	40	9	5	1		274	- 25
V	261				3	32	52	78	46	20	2	1	234	- 27
VI	146					2	2	23	79	27	2	1	136	- 10
VII	166				1		1	15	47	77	11	1	153	- 13
VIII	117							1	1	57	43	2	104	- 13
IX	145									14	69	33	116	- 29
X	48										3	39	42	- 6
XI	29											22	22	- 7
Distribution Of Pupils End of Cycle		58	174	222	278	210	180	175	185	201	131	99	1913	-239

Level IV), seven pupils who were at Level I progressed four levels (to Level V), and one pupil who was at Level I progressed five levels (to Level VI).

Additional data shows the numbers of pupils in each level at the end of the year and the enrollment changes during the year.

Data in Table 26 shows the pupil distribution by grade by reading curriculum level for the full year. Tables 27 through 29 provide the pupil cycle evaluation for grades 4, 5, and 6. Data for grades 1, 2, and 3 appear in the performance objectives section and these additional data are offered to complete the total picture of CPAC material.

The average gain for all pupils was 1.7 levels. Grade 4 pupils gained 1.7 levels, grade 5 pupils gained 1.8 levels, and grade 6 pupils gained 1.5 levels.

Other Standardized Test Results

Data in Table 30 presents the means, standard deviations, change scores, and number of observations for reading and mathematics scores on selected subtests of the California Achievement Test for grade 2 Title I pupils. These data show that in the second grade results the Reading Vocabulary subtest produced a change of 0.91 months; the Reading Comprehension subtest produced a change of 0.76 months; the Math Computation subtest produced a change of 0.82 months; and the Math Concepts and Problem Solving subtest produced a change of 0.82 months. These data indicate that the Reading Vocabulary and Math Computations tests were approximately 0.4 of the year above the anticipated grade increase of 0.50 months, while the Reading Comprehension and Math Concepts and Problem Solving results indicated a gain of approximately 0.3 of one year. All of these gain scores produced results which were above the anticipated 0.5

TABLE 26

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BE READING LEVEL
CYCLE REPORT 1973-74 FOR GRADES 1-6 PUPILS

Assigned Grade	Number Pupils	Pupil Distribution by Reading Curriculum Levels										
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	348	49	134	105	54	6						
2	263	7	23	61	98	40	20	13	1			
3	224	1	3	33	54	38	26	29	33	7		
4	342	1	1	13	38	51	62	66	48	42	20	
5	364		12	5	22	49	47	24	53	86	49	17
6	372		1	5	12	26	25	43	50	66	62	82
Total	1913	58	174	222	278	210	180	175	185	201	131	99

TABLE 27

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADE 4 PUPILS

Beginning of Cycle Data		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	2	1											1	- 1
II	48			12	15	6	3			1			38	- 10
III	45				12	11	15	2	1				41	- 4
IV	92			1	11	32	25	14	1				84	- 8
V	78					2	18	37	8	6			71	- 7
VI	44						1	10	24	3			38	- 6
VII	35							3	13	16			32	- 3
VIII	19								1	15			16	- 3
IX	24									1	20		21	- 3
X														
XI														
Distribution Of Pupils End of Cycle		1		13	38	51	62	66	48	42	20		342	- 45

TABLE 28

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADE 5 PUPILS

Beginning of Cycle Data		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	3		2			1							3	
II	21		5	2	4	5	3						19	- 2
III	51		4	3	11	17	9	3					47	- 4
IV	74		1		6	23	22	5	4	5			66	- 8
V	40					2	12	10	5	3	1	1	34	- 6
VI	60					1	1	1	33	18	2	1	57	- 3
VII	74				1			4	11	40	9	1	66	- 8
VIII	52							1		16	27	1	45	- 7
IX	20									4	7	5	16	- 4
X	11										3	5	8	- 3
XI	3											3	3	
Distribution Of Pupils End of Cycle			12	5	22	49	47	24	53	86	49	17	364	- 45

TABLE 29

TITLE I READING PROGRAM
PUPIL DISTRIBUTION BY READING LEVEL
CYCLE REPORT 1973-74 FOR GRADE 6 PUPILS

Beginning of Cycle Data		End of Cycle Distribution of Pupils by Reading Levels											No. Pupils In School End Of Cycle	Enrollment Change During Cycle
Level	Number Pupils	I	II	III	IV	V	VI	VII	VIII	IX	X	XI		
I	1			1									1	
II	15		1	4	5	1	1		1				13	- 2
III	20				1	5	10	2					18	- 2
IV	30				6	7	3	12	1		1		30	
V	58					12	11	17	9	6	1		56	- 2
VI	34					1		4	22	6			33	- 1
VII	48							8	17	19	2		46	- 2
VIII	46									26	16	1	43	- 3
IX	101									9	42	28	79	- 22
X	37											34	34	- 3
XI	26											19	19	- 7
Distribution Of Pupils End of Cycle			1	5	12	26	25	43	50	66	62	82	372	- 44

TABLE 30

MEANS, STANDARD DEVIATIONS, CHANGE SCORES, AND NUMBER OF OBSERVATIONS FOR READING AND MATHEMATICS SCORES ON SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST FOR GRADE 2 TITLE I PUPILS

Subject	Mean	Standard Deviation	Change Pre- to Post-	Number of Observations
Reading Vocabulary				
Pretest	1.19	0.76	0.91	377
Posttest	2.09	0.96		
Reading Comprehension				
Pretest	1.30	0.81	0.76	350
Posttest	2.04	1.04		
Math Computations				
Pretest	1.23	0.70	0.92	352
Posttest	2.16	0.81		
Math Concepts and Problem Solving				
Pretest	1.34	0.85	0.82	367
Posttest	2.18	1.02		

years, 61.4 percent of the Reading Comprehension respondents scored greater than 0.5 years, while 72.2 percent of the pupils for whom data were compiled on Math Computation scored greater than 0.5 years, and 67.3 percent of the Math Concepts and Problem Solving pupil respondents indicated a gain score of greater than 0.5. When coupled with the material from the Chattanooga Continuous Progress Reading Program, the anticipated gain of 0.5 years for Title I second grade pupils was attained.

Data in Table 31 presents similar results for grade 3 Title I pupils. In this case, Reading Vocabulary change score was 0.83 years; for Reading Comprehension, 0.85 years; for Math Computation, 0.96 years; and for Math Concepts and Problem Solving, 0.94 years. In each case, the anticipated gain was exceeded by .30 to .50 years. These gains indicate that the program is producing results which are better than those which could have been anticipated at program inception time. An additional analysis shows that 63.8 percent of the respondents of Reading Vocabulary Test scored 0.5 years or more; 61.0 percent of the respondents to the Reading Comprehension Test scored 0.5 years or more; 71.6 percent of the respondents to the Math Compuation subtest scored 0.5 years or more; and 72.4 percent of the respondents to the Math Concepts and Problem Solving subtest scored greater than 0.5 years.

TABLE 31

MEANS, STANDARD DEVIATIONS, CHANGE SCORES, AND NUMBER OF OBSERVATIONS FOR READING AND MATHEMATICS SCORES ON SELECTED SUBTESTS OF THE CALIFORNIA ACHIEVEMENT TEST FOR GRADE 3 TITLE I PUPILS

Subject	Mean	Standard Deviation	Change Pre- to Post-	Number of Observations
Reading Vocabulary				
Pretest	1.71	1.12	0.83	315
Posttest	2.55	1.37		
Reading Comprehension				
Pretest	1.92	0.90	0.85	313
Posttest	2.78	1.42		
Math Computations				
Pretest	1.93	0.82	0.96	320
Posttest	2.89	0.94		
Math Concepts and Problem Solving				
Pretest	1.91	1.12	0.94	319
Posttest	2.87	1.32		

Supportive Services

Health Services. The Title I nurses visited the Title I schools on a regular basis during the school year. Referrals were received from each school. Referrals were analyzed in terms of medical, dental, vision, and hearing data. Table 32 follows, showing the results of the year's activities.

TABLE 32

SOURCE AND NUMBER OF PUPILS REFERRED FOR SPECIAL HEALTH CARE

SCHOOL	MEDICAL	DENTAL	VISION	HEARING
Avondale	9	1	6	0
Bell	18	0	5	2
Carpenter	52	1	13	0
Garber	36	1	11	0
Henry	31	2	8	0
Highland Park	27	2	9	0
Howard	25	0	2	0
Orchard Knob	123	14	23	0
Piney Woods	20	1	4	5
Ridgedale	16	0	2	0
Trotter	5	1	3	0
TOTAL:	362	23	86	7

More than 1,800 children were seen by Health Service personnel in the schools, with some being seen several times. Vision failures were screened and the 1972-73 vision failures were followed up and the incomplete cases were handled. Detailed information on the vision test results and pupil disposition is available in the Title I office.

Parent Involvement Program

The Title I Parent Involvement Specialist worked throughout the year to implement the parent phase of the program through individual school and city-wide activities. Local PAC meetings were held in each school throughout the school year and the Policy Advisory Council met monthly, October through August.

Parent involvement in local PAC activities involved 553 parents while city-wide activities involved 416 parents. City-wide activities for parents included:

1. Attendance at school board meetings.
2. Sesame Street Workshops.
3. Leadership Workshops.
4. Parent Effectiveness Workshops.
5. Role Playing Classes.
6. Sewing Classes.
7. Nutritional Classes.
8. Research with Brock Candy Co.
9. Consumer Education Workshops.
10. Exercise Classes.
11. Boat Trip.

The following table shows the involvement of each school in PAC activities within the school.

TABLE 33

INVOLVEMENT OF SCHOOLS IN PAC ACTIVITIES WITHIN SCHOOLS

School	Number of Times Parents Attended Meetings and/or Activities	Individual Parent Attendance
Avondale	99	15
Bell	111	14
Carpenter	113	23
Garber	127	8
Henry	272	23
Highland Park	398	23
Howard	97	9
Orchard Knob	279	24
Piney Woods	119	20
Ridgedale	102	22
Trotter	76	7

TABLE 34

RESPONSES TO SILENT READING

PRE-TEST TO POST-TEST MEASURES

	1	2	3	4	5	6	7	8	9	10
1	2	1								
2		2	9	3						
3			1	8	5					
4				1	2	3				
5					1	1	2			
6							1			
7								1	2	
8									2	
9										
10										

Part "C" Project -- Special Student Study

The Title I "C" Project was designed to provide: (1) a pilot program of special instruction in two target schools for a select group of Title I participants whose achievement in reading was determined, on the project evaluation, to be the lowest of all project participants; and (2) to provide related staff development activities to upgrade both staff leadership and teacher skills in the teaching of hard-core remedial cases.

Performance Objectives. (1) By June 1, 1974, 60 percent of the Title I special study students will display a knowledge of oral reading as evidenced by a gain of one test level from pre- to post-test scores on the oral reading item of the Durrell Analysis of Reading Difficulty. (2) By June 1, 1974, 60 percent of the Title I special study students will display a knowledge of silent reading as evidenced by a gain of one test level from pre- to post-test scores on the silent reading item of the Durrell Analysis of Reading Difficulty.

Data Analysis. The data collected to evaluate these objectives are presented in Tables 34 and 35. These data show the initial or pre-test placement and the final or post-test placement for all participants on both oral and silent readings. These data results were substituted for the Durrell Analysis.

Silent Reading. These data show 40 of 47 or 85 percent of the special study pupils gained one or more levels on the Silent Reading measure. Additionally, 15 of 47 or 32 percent gained two levels. Therefore, this objective was met. Results of the pupil gains in silent reading is reflected in Table 34.

Oral Reading. These data show 41 of 47 or 87 percent of the special study pupils gained one or more levels on the Oral Reading measure. These data show 17 of 47 or 36 percent gained two levels and 1 of 47 or 2 percent gained three levels. Therefore, this objective was met. Table 35 shows these data.

TABLE 35

RESPONSES TO ORAL READING

PRE-TEST TO POST-TEST MEASURES

	1	2	3	4	5	6	7	8	9	10
1	1	2								
2		1	8	3						
3			2	5	3	1				
4				1	5	5				
5					1		2			
6							1	1		
7								1	3	
8									1	
9										
10										